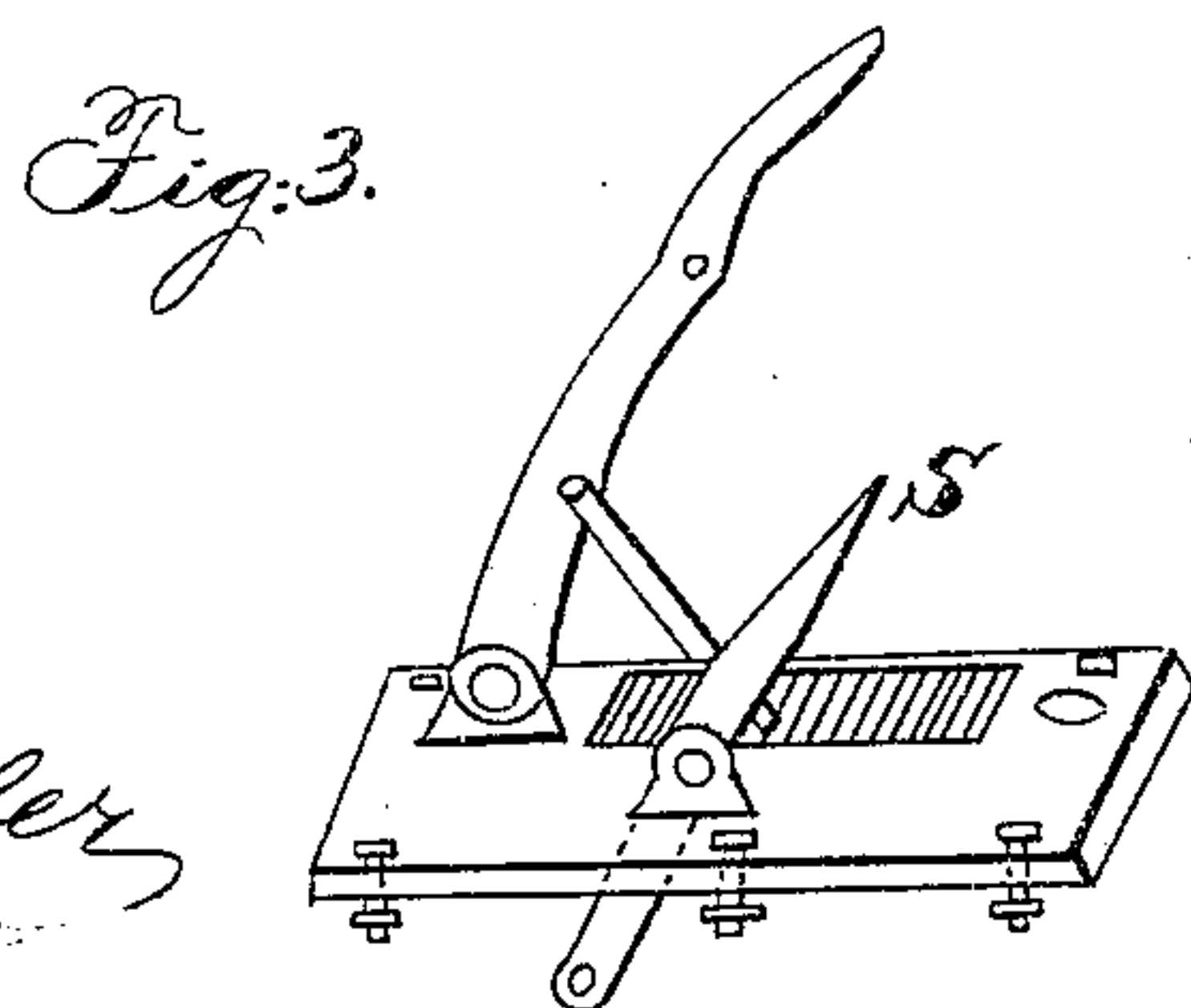
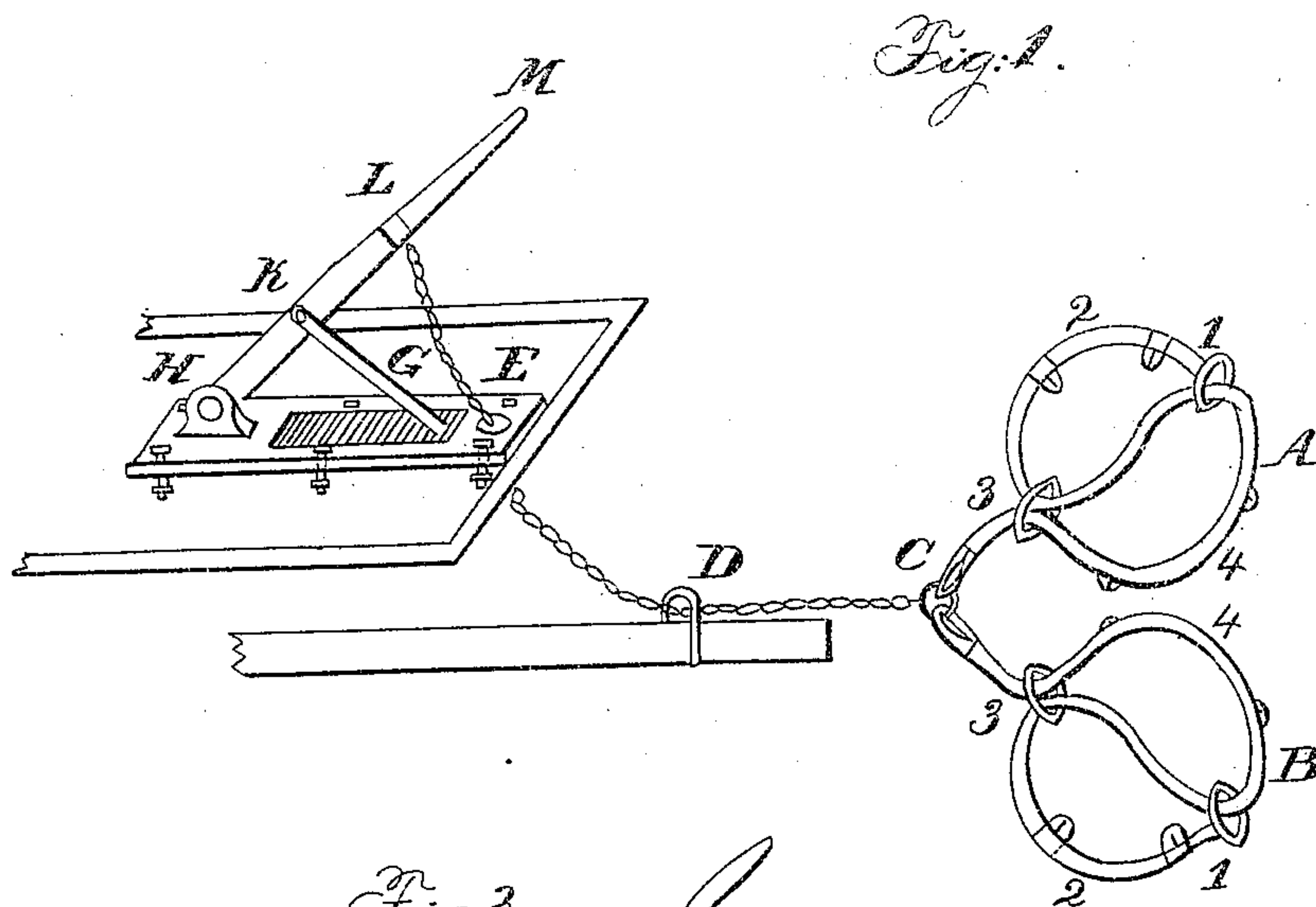
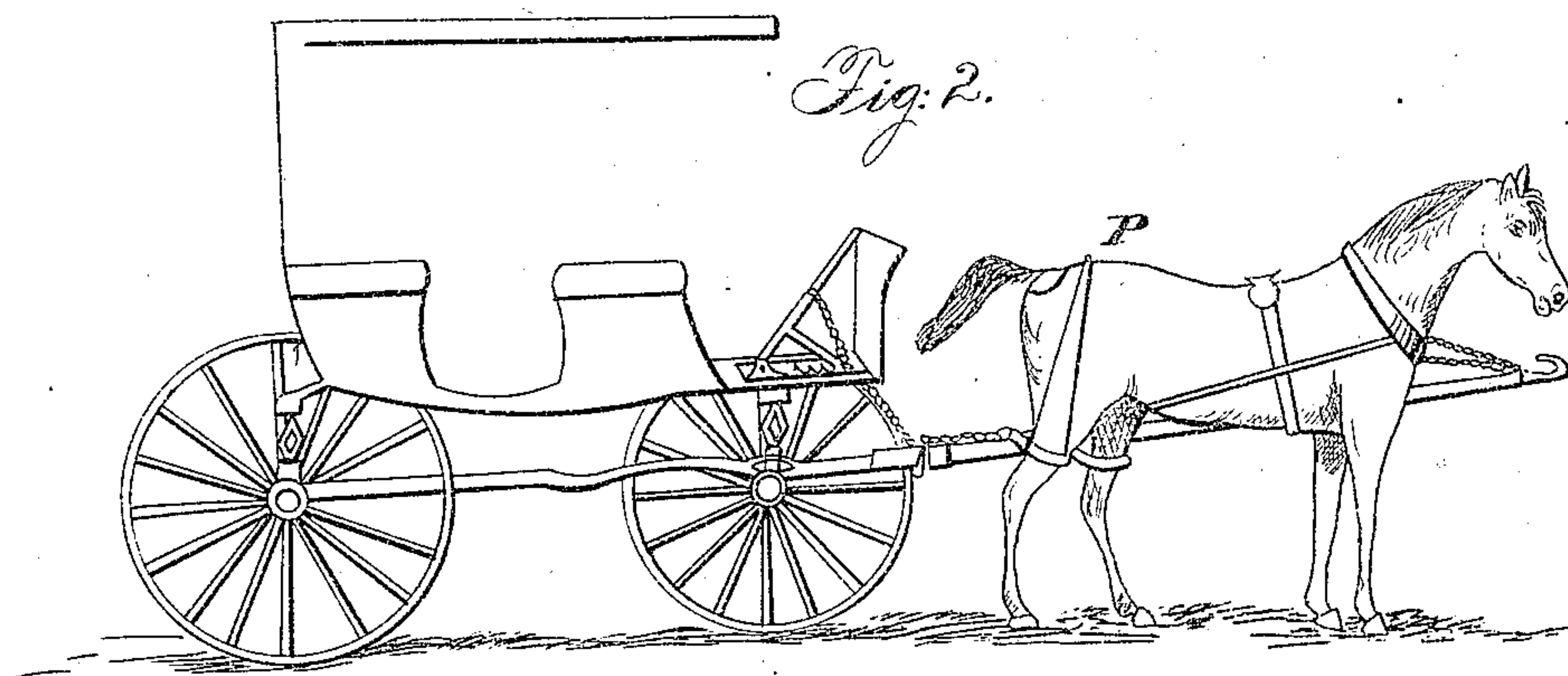


S. M. COOPER.
Detaching Horses.

No. 68,606.

Patented Sept. 10, 1867.



Witnesses
W. Adler
E. Moran

Inventor
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United States Patent Office.

SAMUEL M. COOPER, OF FAIRFAX COUNTY, VIRGINIA.

Letters Patent No. 68,606, dated September 10, 1867.

IMPROVEMENT IN APPARATUS FOR STOPPING RUNAWAY HORSES.

The Schedule referred to in these Letters Patent and making part of the same.

Be it known that I, SAMUEL M. COOPER, of Fairfax county, Virginia, have invented a new and useful Machine for the Purpose of Stopping Runaway Horses attached to vehicles, and called a "Safety Attachment;" and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 represents the front part of the floor of the carriage, with the dash-board removed, showing the invention in detail; which consists first, in a strap, A, 1 2 3 4, made of trace-leather, one and one-half ($1\frac{1}{2}$) inch broad, and half an ($\frac{1}{2}$) inch thick, to the end of which strap an iron ring is strongly sewed at 1. The strap then passes round the left hind leg of the near horse, below the breeching, in the direction 1 2 3 4, passing through the movable ring at 3, thence through the ring 1 and around the right hind leg, and again through the movable ring at 3, and is attached to the chain at the ring at C by means of a spring-hook, the object of which spring-hook is for the convenience of readily detaching the strap from the chain, and in unharnessing the horse. A like arrangement is made for the off horse with the strap B, 1 2 3 4, which passes, first round his right hind leg and then round his left hind leg, through similar rings to the ring at C, to which it is attached in the same manner. The chain, commencing at C, passes through a wrought-iron staple, D, placed either upon the pole-fork, splinter-bar, or other practicable part of the running-gear, thence upwards through the aperture E in the lever-bed, and is attached to the lever by the wrought-iron ring L. H is a wrought-iron slot, welded to the lever-bed in which the lever works, and K a pawl, is attached, which works in the ratchet G. The lever-bed is of wrought iron, twelve inches long, six inches wide, and one inch thick, and the ratchet G is cut into its surface. The bed is secured to the floor of the carriage by bolts and nuts.

Figure 2 is a longitudinal elevation of a two-horse carriage with the off horse represented, and the attachment in its place, the lever being in its habitual position and the straps relaxed. The straps are adjusted to any desired height upon the legs of the horses by means of two vertical straps, (fig. 2, P,) which cross each other and are secured to the back-band of the horse near the crupper. The four ends of these two vertical straps buckle into buckles placed upon the outside of the horizontal strap, in such positions as not to interfere with the play of the horizontal strap through the rings. The vertical straps serve to support the horizontal straps, and to keep them from touching the legs of the horses when in motion. The habitual position of the horizontal straps upon the legs of the horses is about six inches below the breeching, but they can be raised or lowered by means of the buckles to any desired position so as to adjust them to difference in conformation of the horses or other variation.

The object of this invention is to stop horses when they are running away, after they have become unmanageable from breakage of the reins, or from other causes the driver has lost control of them. The handle of the lever is convenient to the hand of the driver, and its habitual position is inclined forward, as in the figure, with the straps sufficiently slacked to permit the horses to move at any gait, but when the driver finds that he cannot stop the horses by means of the reins, by drawing back the handle of the lever firmly and gradually, the lever will tighten the straps, and bind the muscles of the legs in such a manner as to prevent the horses from moving. The pawl working in the ratchet will maintain the purchase gained. By raising the pawl with the foot and letting the lever fall forward, the straps will resume their original looseness, and the horses left free to move as before.

The advantages of this invention are that it does no injury to the horses, not being in the way until it is absolutely necessary to use it, and when used it is at once effectual, being superior to the various modes of detaching runaway horses from vehicles, which in fact encourage them in running away instead of preventing. This invention can also be used for breaking young horses to vehicles and thoroughly controlling them.

The invention is here represented for a pair of horses; for a single horse but one set of straps is necessary to be used in connection with the same lever.

For stages and all vehicles whose weight makes it necessary to check the momentum at the time of stopping the horses, I propose to use the lever-bed shown in Figure 3, which is simply the before-described bed, increased in width, and furnished with a treadle for the foot S, which can be used in connection with the ordinary stage-brake, when the horses are running down hill. The driver, by placing his foot upon the treadle and drawing back the lever with his hand, can check the horses when they are running down hill, using more or less pressure upon each or both levers, as he finds it necessary.

For all light vehicles I propose to use the lever-beds described in figs. 1 and 2. Should it, however, be desirable to use a brake also for lighter vehicles, I propose to construct lever-bed, fig. 3, of such suitable weights and dimensions as will enable it to be readily adapted to all descriptions of vehicles.

For such vehicles whose forms of flooring render it impracticable to adapt the before-described lever-beds, I propose to bolt on the lever and slot, the ratchet and the treadle, each separately, in the most convenient places, so modifying their form and dimensions as to render them conformable.

What I claim as my invention, and desire to secure by Letters Patent, is—

The binding of the legs of the horses by the means of the above invention, and the application of straps, in combination with chains and levers operating substantially as and for the purpose set forth.

SAMUEL M. COOPER.

Witnesses:

M. ADLER,

E. MORAN.